

ABSTRACT OF THE DISCLOSURE

Method and instrument for measuring the bead cutting shape of an electric welded tube accurately without being affected by the difference in the luminance level of an optical cut image between a cut part and a uncut part. An optical cut image is displayed while being superposed on a thin-line image obtained by processing the optical cut image through a specified image processing means. Profile of an electric welded tube is approximated by a quadratic function and a region including the coordinate at the apex of a bead is specified as the bead. Shape data of the tube surface at a part corresponding to the bead part is then determined from the boundary at the left and right ends of the bead part preset for the shape data of the tube surface including the bead part, and the apex position of the bead part calculated separate. Subsequently, the width, height and rising angle of the bead, and the level difference at the left and right boundary of the bead part and the bare tube part are calculated, respectively, based on the approximate function of the left and right bead shapes and the approximate function of the bare tube shape.